

The Commonwealth of Massachusetts  
Executive Office of Health and Human Services  
Department of Public Health  
**William A. Hinton State Laboratory Institute**  
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK  
GOVERNOR

TIMOTHY P. MURRAY  
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD  
SECRETARY

JOHN AUERBACH  
COMMISSIONER

Jessica Katz, ADA

Plymouth County District Attorney's Office  
By e-mail

May 11, 2011

Re: Comm. v. Dana Carthy State Lab # [REDACTED]

ADA Katz,

Please find enclosed a discovery packet for the case noted above. The material is collated in the following manner:

- 1) the chemists' c.v.'s
- 2) the evidence office receipt to the Peabody Police
- 2) inventory control card for the submission
- 3) the bench notes on the "Pharmaceutical Analysis Form"
- 4) the pharmacopeia citation from Micromedex
- 5) the gas chromatography/mass spectrometry (gc/ms) data

I was the custodial chemist for this case, conducting the preliminary analysis of the tablets. Ms. Khan performed the confirmatory tests on gas chromatography/ mass spectrometry (gc/ms). If you need further clarification of this material, please call me directly at (617) 983-6627.

Sincerely,

A handwritten signature in black ink, appearing to read "Michael Lawler".

Michael Lawler  
Senior Chemist

Cc: Charles Salemi, Annie Khan

## Curriculum Vitae

**Michael Lawler**

### Education:

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975  
Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

### Experience:

**1990-present** currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits.

**2005-present** lecturer in chemistry, Curry College, Milton, Ma.

**1988-1990** New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

**1983-1988** Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

**1982-1983** NENS hypothyroid assay technologist with Tuft's University

**1979-1981** Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

### Additional education and special training

Drug Analysis, completed six week training course by senior staff within the Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court  
CDC course in cell culture

CDC course in antibiotic resistance

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

### Journal Publications

**Screening**, 1992, 1:34-37; Lawler,M., Frederick,S., Rodriguez-Anza, S., Wolf,B., Levy,H., *Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases*

**Genetic Screening**, 1990, 11-18, Mitchell,M., Lawler,M., Walraven,C., Hermos,R., *To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?*

**The Journal of Pediatrics**, 116: 78-83, Secor-McVoy,J., Lawler,M., Schmidt, M., Ebers,D., Hart,P., Pettit,D., Blitzer,M., Wolf,B., *Partial Biotinidase Deficiency: Clinical and Biochemical Features*

### Professional Affiliations

Northeastern Association of Forensic Scientists (NEAFS) since 2005

### Awards

Theobald Smith Education Grant for graduate studies

## Curriculum Vitae

**Annie Khan (Dookhan)**

### **Education:**

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

### **Experience:**

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

\*Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

\*Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

\*Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

\*Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

\*Maintenance and repairs of all analytical instruments.

\*Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

\*Responsible for the Quality Control/Quality Assurance program for the drug lab.

\*Notary Public.

\*Qualified as an expert witness in Massachusetts Courts and U.S. District Court

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

\*Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department.

\*Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

\*Writing, revising and reviewing Standard Operating Procedures (SOPs).

\*Trained and supervised new chemists and interns for the department.

\*Routine QC testing of products for the FDA.

\*Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

\*Calibration, preventive maintenance, QC and QA of analytical instrumentation.

\*Complete testing of chemicals for Vendor Validation Project for the FDA.

\*Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

### **Additional Training:**

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP course with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS courses with Agilent Technologies and Restek.

HPLC course with Waters Cooperation.

FTIR course with Spectros.

TOC training with MBL and Sievers.

### **Association:**

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

*The Commonwealth of Massachusetts*  
*Executive Office of Health and Human Services*  
*Department of Public Health*  
*State Laboratory Institute*

Boston Drug Laboratory  
Tel (617) 983-6622  
Fax (617) 983-6625

Amherst Drug Laboratory  
Tel (413) 545-2601  
Fax (413) 545-2608

Boston Hours

8:00 - 11:00  
2:00 - 4:00

Amherst Hours

9:00 - 12:00  
1:00 - 3:00

**DRUG RECEIPT**

City or Department: Brockton Police Department Police Reference No.: [REDACTED]

Name and Rank of Submitting Officer: DONOHUE, PATRICK S 380 DOC # R013464

Defendant(s) Name (last,first,initial):  
[REDACTED]

*To be completed by Submitter*

**Description of Items Submitted**

*To be completed by Lab Personnel*

**Gross Weight**

**Lab Number**

1) WHITE TABLETS IN TINFOIL (QTY: 4) TABLETS (S18070 )	2.52g	[REDACTED]

Received By: [Signature]

Date: 12-15-10

No. [REDACTED]  
City: Brockton Police Dept.  
Officer: Detective PATRICK DONOHUE  
Def: [REDACTED]

Date Analyzed: 03-19-11

Amount: 4.0

Subst: TAB

No. Cont: 1

Cont: pb

(and foil)

Date Rec'd: 12/15/2010

No. Analyzed: 1

Gross Wt.: 2.52

white

Net Weight:

# Tests: 1

1/10/11

2 ASD

11-34  
Prelim:

Oxycodone

Findings:

Oxycodone

60317115  
GEMSB

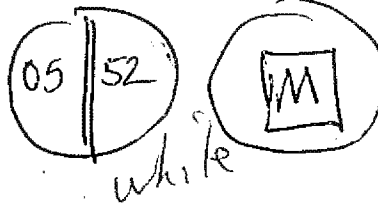
Pharmaceutical Analysis Sheet

Sample [REDACTED] City Brockton E.O. weight 2.52

Count 4 tabs Description:

Ballistic I.D. oxycodone

I.D. Source micromedex



Final I.D. oxycodone MS chemist ASD completed 3-19-11

**POISINDEX® Product List****Oxycodone Hydrochloride**

**Regulatory-Status:** Schedule II

**Ingredients**

**Active-Ingredient:** Oxycodone Hydrochloride - 5 MG

**Availability & Manufacturing**

**Availability:** United States

**Available-Container-Sizes:** Bottle of 100; Package of 5 - 30 count cards; Ten 2 x 5 Blister Cards

**Contact:** Covidien Mallinckrodt

**Product ID:** 6724458

**AAPCC Code:** 037705 - Oxycodone Alone or in Combination (Excluding Combination Products with Acetaminophen or Acetylsalicylic Acid)

**Registry Numbers:** NDC 0406-0552-01  
NDC 0406-0552-32  
NDC 0406-0552-62

**Physical Description**

**Imprints:** M - The M is contained in a box.  
0552 - The imprint 0552 is separated by a score mark.

**Alt Imprints:** M0552 - The M is contained in a box.  
M 0552 - The imprint 0552 is separated by a score mark.  
M 05 52 - The imprint 0552 is separated by a score mark.

**Form:** Oral Tablet

**Color:** White

**Shape:** Circle

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Area Percent / Library Search Report

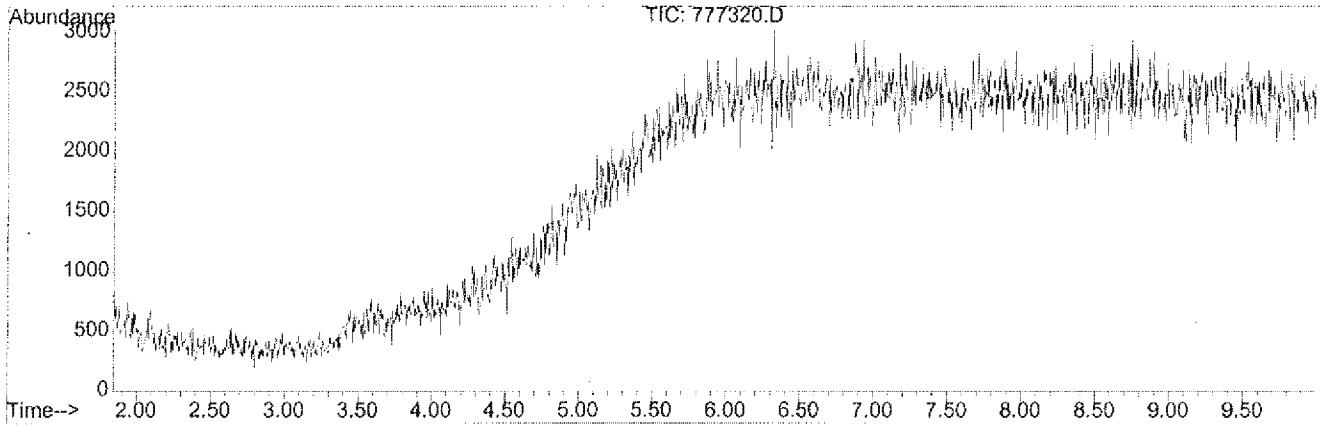
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Information from Data File:

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Operator : ASD  
Date Acquired : 17 Mar 2011 21:27  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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ASD  
5-09-11



Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

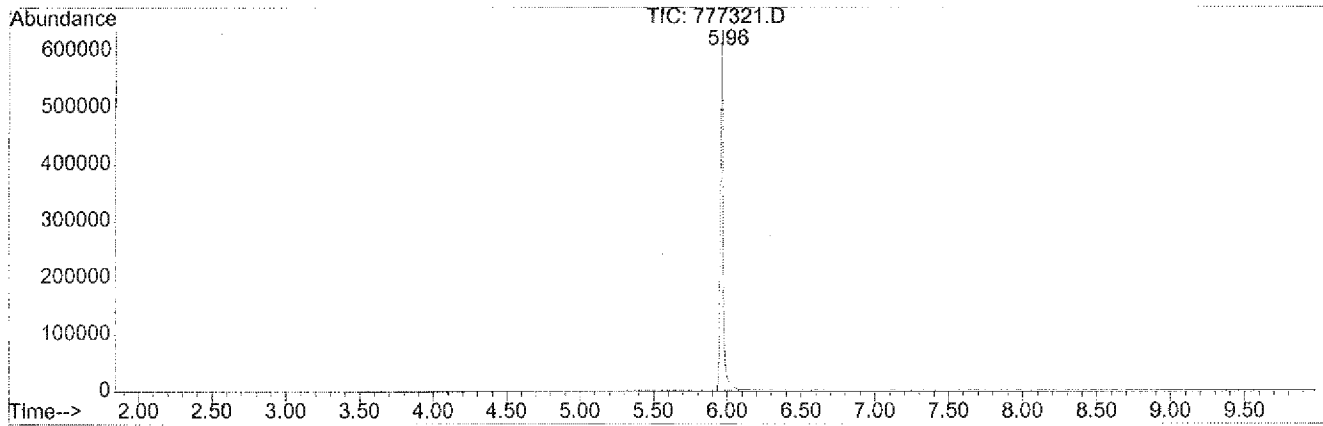
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\SYSTEM7\03\_17\_11\777321.D  
Operator : ASD  
Date Acquired : 17 Mar 2011 21:39  
Sample Name : OXYCODONE STD  
Submitted by :  
Vial Number : 21  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
5.962	796568	100.00	100.00

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# Area Percent / Library Search Report

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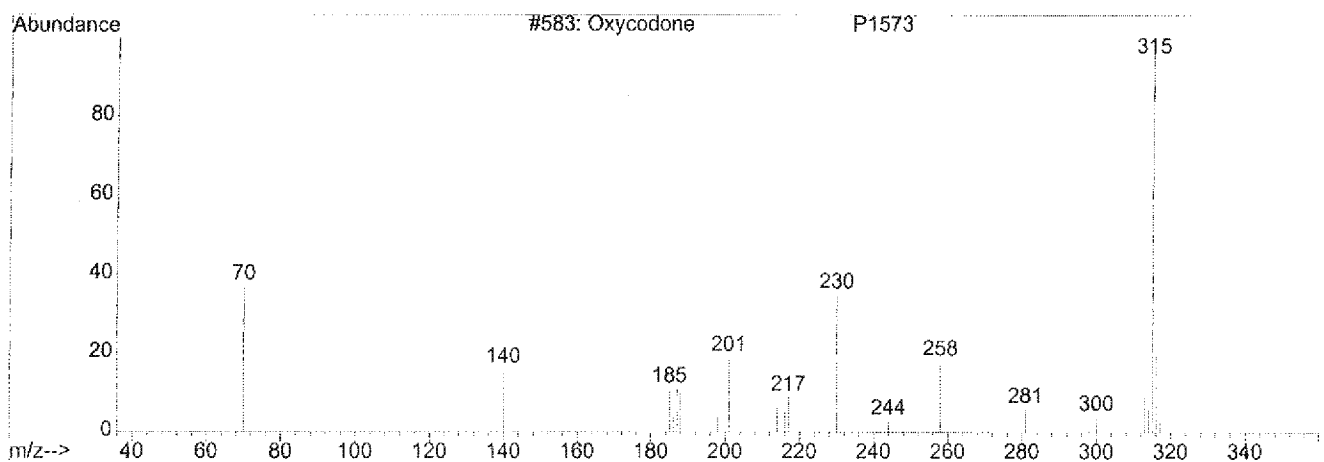
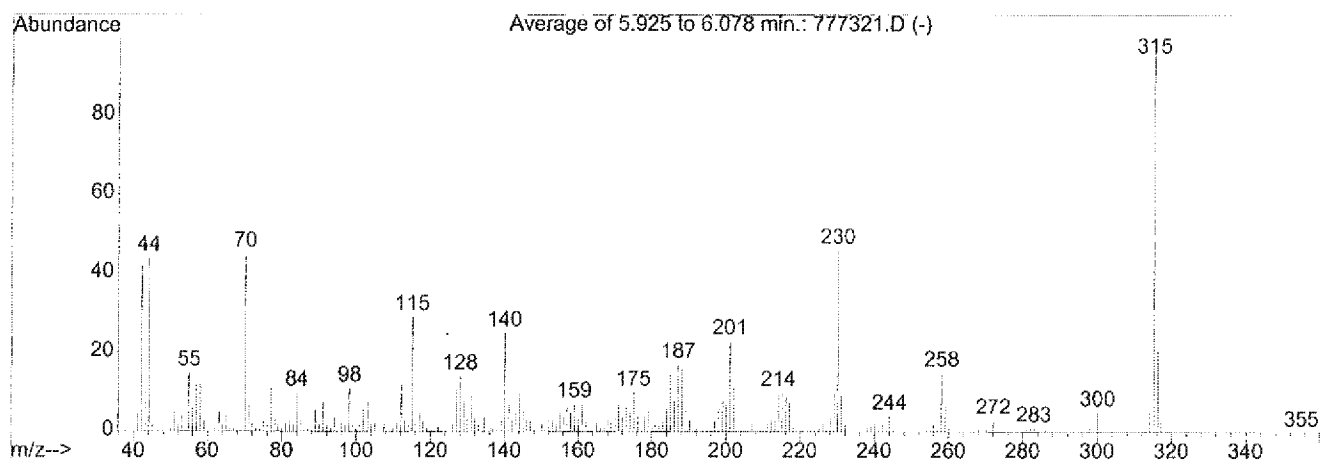
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File Name       : F:\SYSTEM7\03_17_11\777321.D
Operator        : ASD
Date Acquired   : 17 Mar 2011  21:39
Sample Name     : OXYCODONE STD
Submitted by    :
Vial Number     : 21
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	5.96	C:\DATABASE\PMW_TOX2.L		
		Oxycodone	000076-42-6	91
		Endogenous biomolecule AC	000000-00-0	9



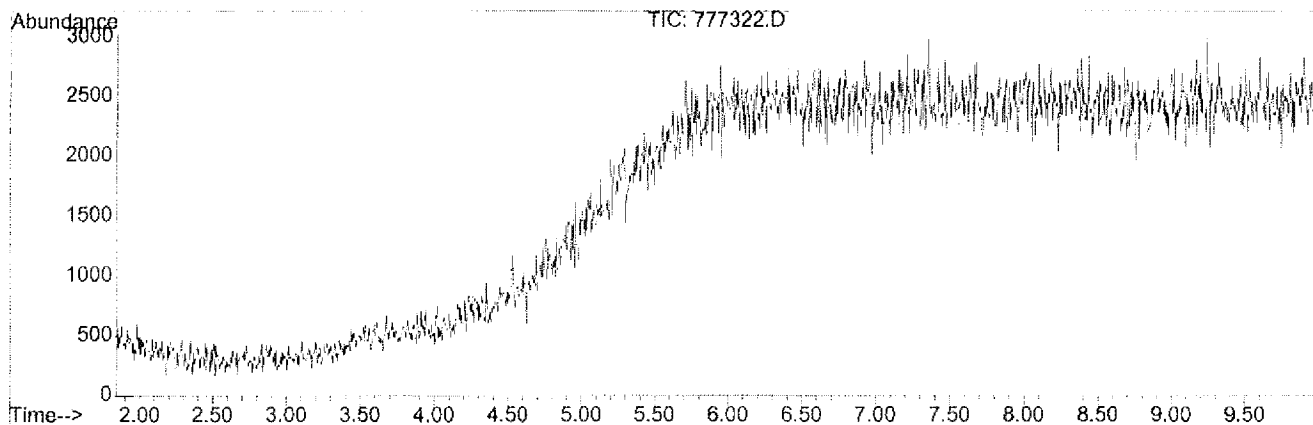
# Area Percent / Library Search Report

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Operator : ASD  
Date Acquired : 17 Mar 2011 21:52  
Sample Name : BLANK  
Submitted by :  
Vial Number : 1  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

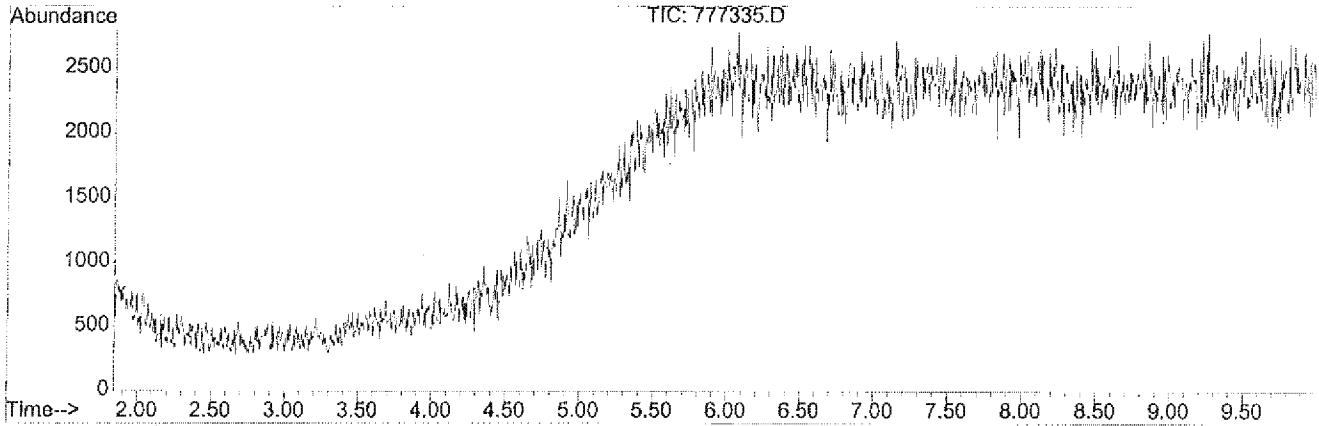
# Area Percent / Library Search Report

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## Information from Data File:

File Name : F:\SYSTEM7\03\_17\_11\777335.D  
Operator : ASD  
Date Acquired : 18 Mar 2011 00:34  
Sample Name : BLANK  
Submitted by : MGL  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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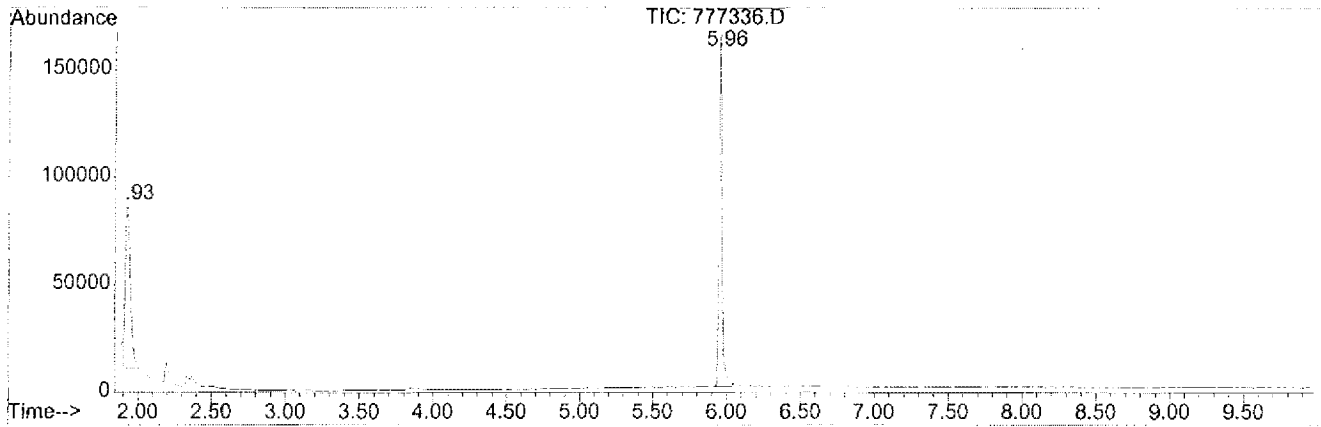
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\03\_17\_11\777336.D  
 Operator : ASD  
 Date Acquired : 18 Mar 2011 00:46  
 Sample Name : XXXXXXXXXX  
 Submitted by : MGL  
 Vial Number : 36  
 AcquisitionMeth: DRUGS  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
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5.957	223907	54.77	100.00

# Area Percent / Library Search Report

**Information from Data File:**

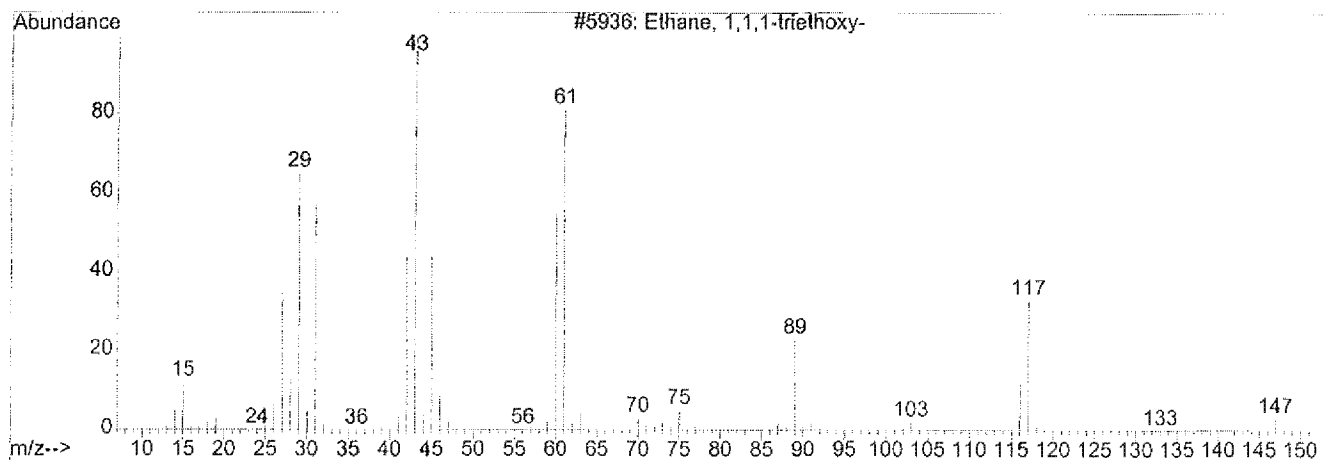
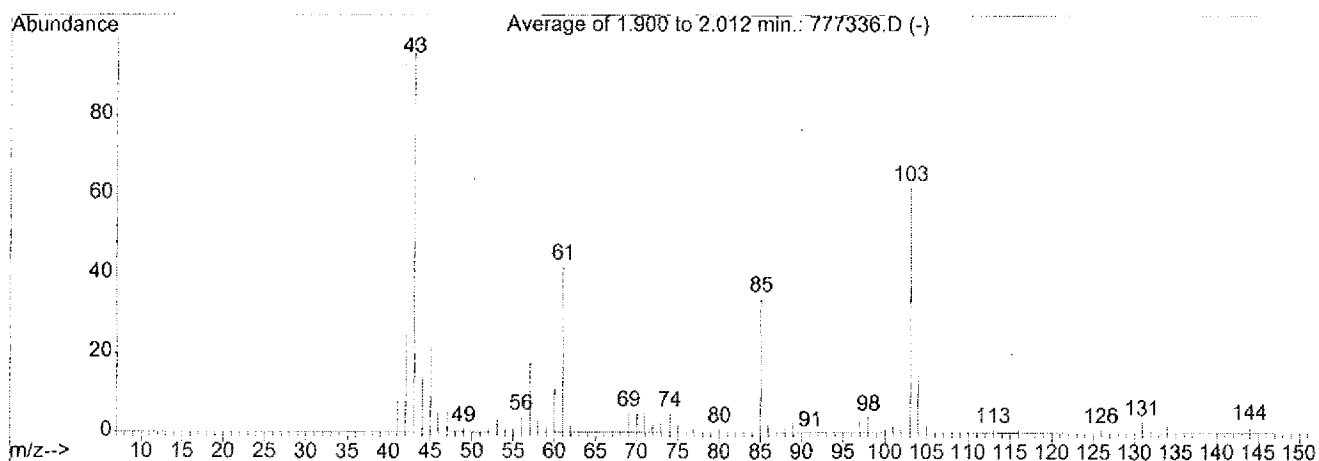
```

File Name       : F:\SYSTEM7\03_17_11\777336.D
Operator        : ASD
Date Acquired   : 18 Mar 2011  00:46
Sample Name     : ██████████
Submitted by    : MGL
Vial Number     : 36
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
1	1.93	C:\DATABASE\NIST98.L		
		Ethane, 1,1,1-triethoxy-	000078-39-7	17
		Carbamic acid, acetyl-, ethyl ester	002597-54-8	12
		sec-Butyl nitrite	000924-43-6	10



# Area Percent / Library Search Report

**Information from Data File:**

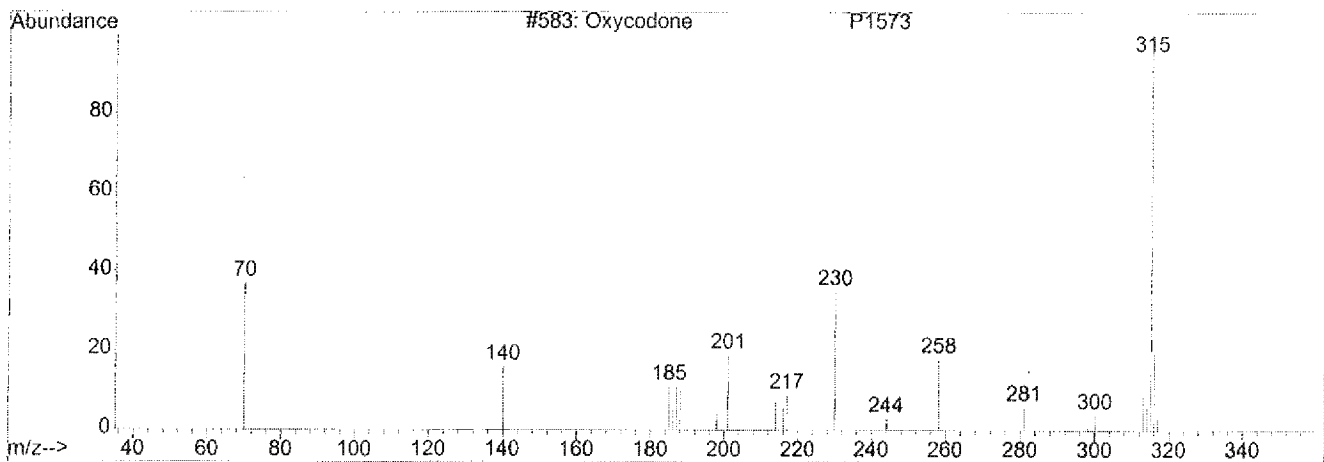
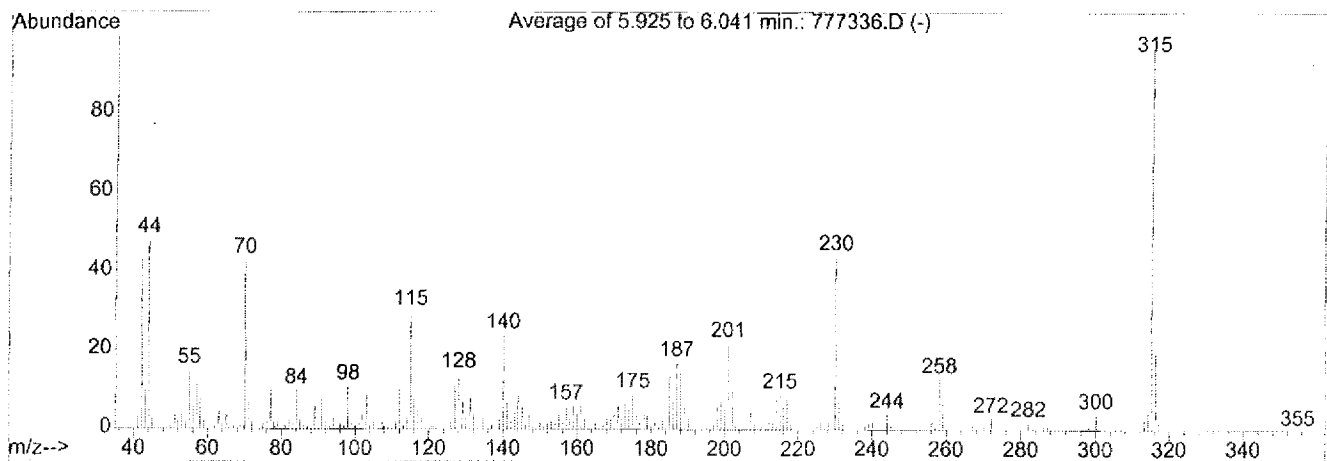
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File Name       : F:\SYSTEM7\03_17_11\777336.D
Operator        : ASD
Date Acquired   : 18 Mar 2011   00:46
Sample Name     : 
Submitted by    : MGL
Vial Number     : 36
AcquisitionMeth : DRUGS
Integrator      : RTE
  
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
  
```

PK#	RT	Library/ID	CAS#	Qual
2	5.96	C:\DATABASE\PMW_TOX2.L		
		Oxycodone	000076-42-6	93
		Endogenous biomolecule AC	000000-00-0	2





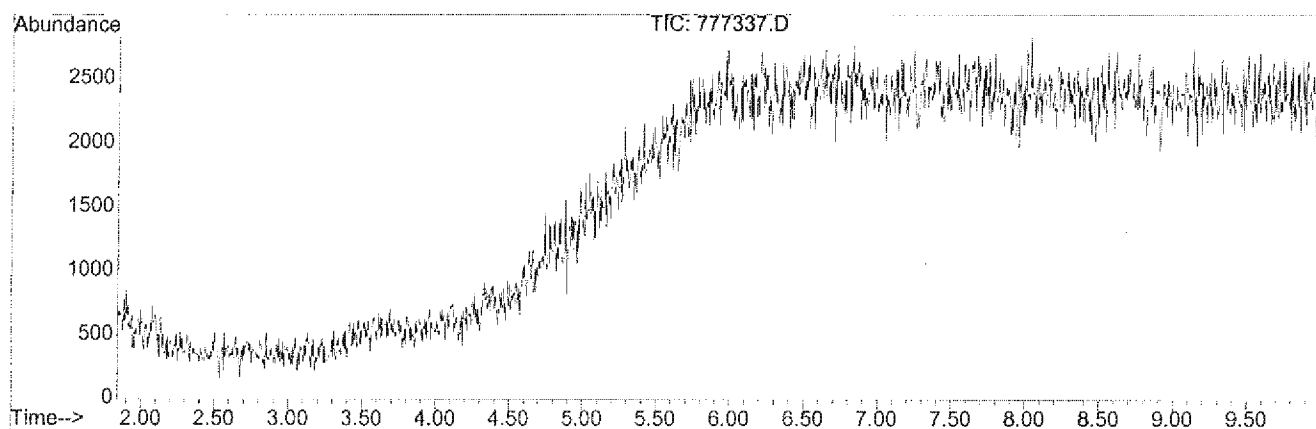
# Area Percent / Library Search Report

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Operator : ASD  
Date Acquired : 18 Mar 2011 00:59  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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\*\*\*NO INTEGRATED PEAKS\*\*\*

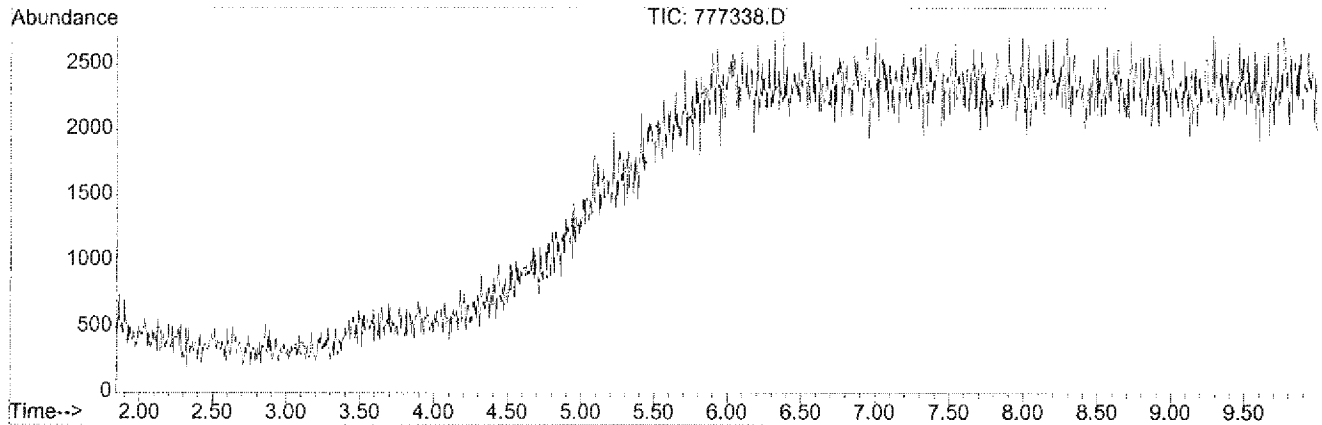
Area Percent / Library Search Report

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Information from Data File:

File Name : F:\SYSTEM7\03\_17\_11\777338.D  
Operator : ASD  
Date Acquired : 18 Mar 2011 1:11  
Sample Name : BLANK  
Submitted by :  
Vial Number : 2  
AcquisitionMeth: DRUGS  
Integrator : RTE

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Ret. Time	Area	Area %	Ratio %
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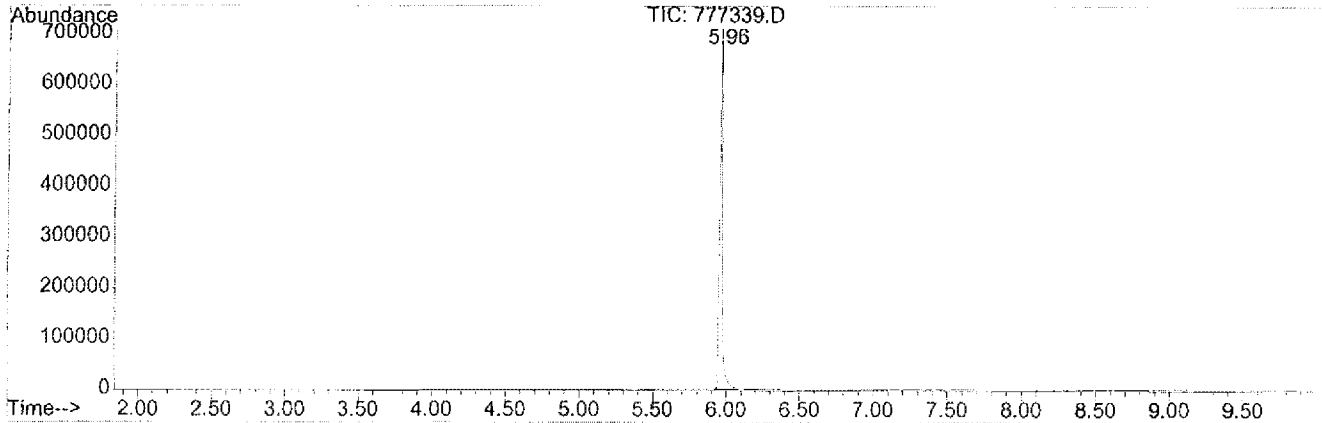
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\*\*\*NO INTEGRATED PEAKS\*\*\*

# Area Percent / Library Search Report

Information from Data File:

File Name : F:\SYSTEM7\03\_17\_11\777339.D  
 Operator : ASD  
 Date Acquired : 18 Mar 2011 1:24  
 Sample Name : OXYCODONE STD  
 Submitted by :  
 Vial Number : 21  
 AcquisitionMeth: DRUGS  
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
5.962	897570	100.00	100.00

# Area Percent / Library Search Report

**Information from Data File:**

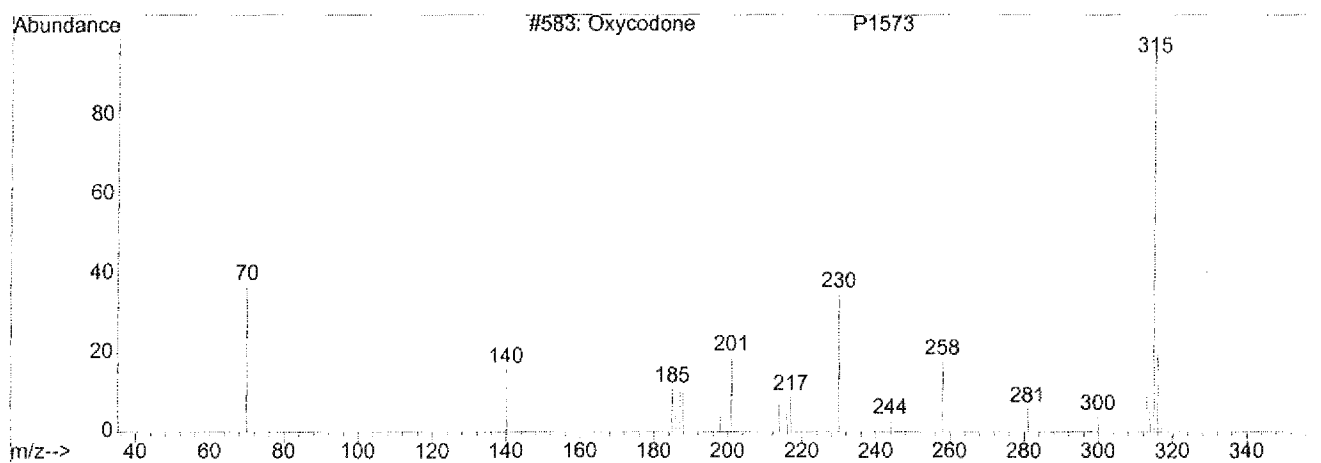
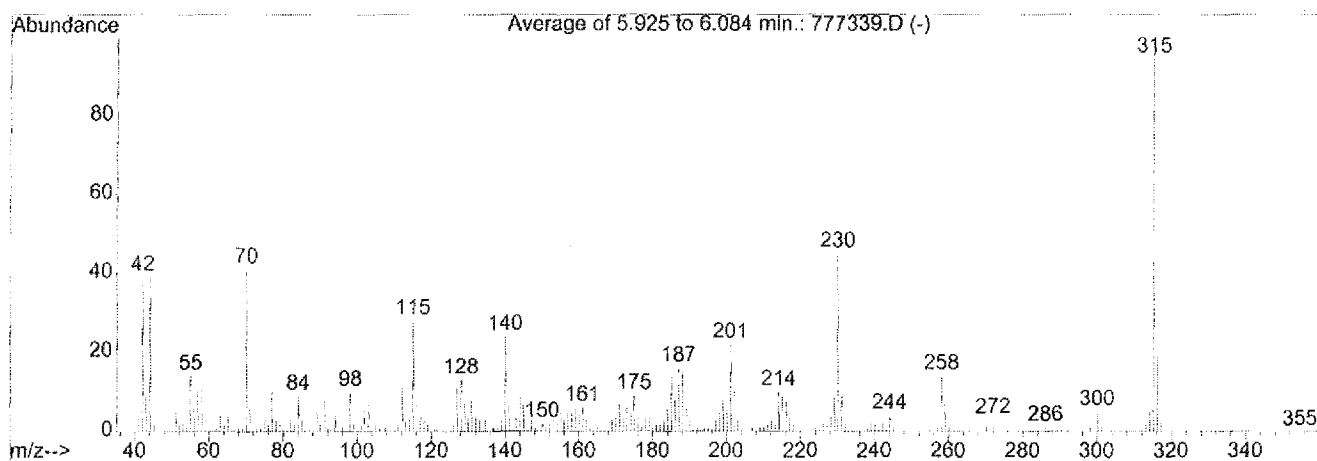
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File Name       : F:\SYSTEM7\03_17_11\777339.D
Operator        : ASD
Date Acquired   : 18 Mar 2011   1:24
Sample Name     : OXYCODONE STD
Submitted by    :
Vial Number     : 21
AcquisitionMeth : DRUGS
Integrator      : RTE
    
```

```

Search Libraries: C:\DATABASE\SLI.L           Minimum Quality: 90
                  C:\DATABASE\PMW_TOX2.L      Minimum Quality: 90
                  C:\DATABASE\NIST98.L
    
```

PK#	RT	Library/ID	CAS#	Qual
1	5.96	C:\DATABASE\PMW_TOX2.L		
		Oxycodone	000076-42-6	91
		Endogenous biomolecule AC	000000-00-0	2



***Last page.....no further data***